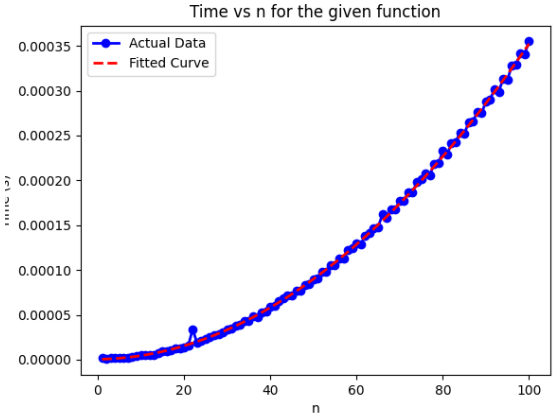

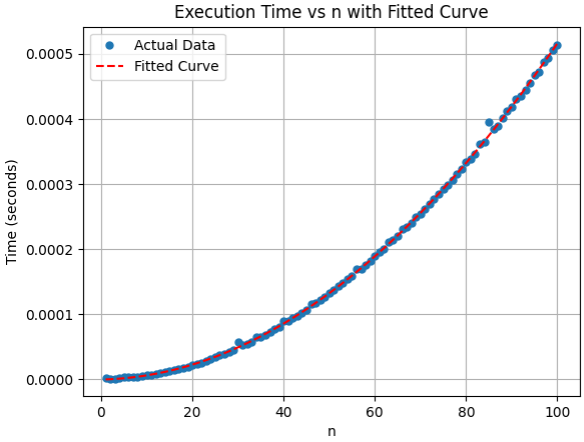

The T'(n) function for modified function is:-

$T'(n) = n^{1/2} * (t\_x + t\_y + t\_i + t\_j)$

Therefore $T'(n) \geq T(n)$, $T'(n) \approx 0.0008$ and $T(n) \approx 0.0005$

where:-

* T'(n) is the time Complexity of modified function
* T'(n) " " " " the old function.
* n is the i/p size.
* t_x is the time Complexity $x = x+1$
* t_y " " " " $y = i+j$
* t_i " " " " $i = i+1$
* t_j " " " " $j = j+1$